



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,406	01/15/2004	Eric A. Merz	D/A1377 XERZ 2 00474	6098
27885	7590	03/03/2006	EXAMINER	
FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			DO, AN H	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
10/758,406	MERZ ET AL.	
Examiner	Art Unit	
An H. Do	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 and 50-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 and 50-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/15/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 15 January 2004 was filed and is being considered by the examiner.

Claim Objections

2. Claim 1 is objected to because of the following informalities: "a marking material container" in line 3 should be changed to --the marking material container--.

Appropriate correction is required.

3. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 50-66 have been renumbered 48-64 respectively. ***Claim***

Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4, 7-9, 11-22, 25-27, 29-37, 40-42, 44-47, 50 and 51 are rejected under 35 U.S.C. 102(e) as being anticipated by Jones, II et al (US 2005/0178841).

Jones, II et al disclose in Figures 11-13 the following claimed features:

Regarding claims 1, 20, a method and marking material container for obtaining information from a marking material container (Figure 12, "product") comprising: providing a marking material container (Figure 12, "product") having a phosphorescent material ("Mark", page 2, paragraph [0026]) with predetermined phosphor properties for emitting light with characteristics corresponding to the information; shining light (Figure 1, "power supply sources) at a container position for a period of time; and sensing ("detection") for emitted light coming from the phosphorescent material (Figure 11).

Regarding claim 2, further comprising: determining the characteristics of the emitted light; and generating the information (Page 2, paragraph [0010]).

Regarding claim 3, 21, 36, wherein the information identifies the marking material container (Page 2, paragraph [0010]).

Regarding claim 4, 22, 37, wherein the information identifies the marking material in the marking material container (Page 2, paragraph [0010]).

Regarding claims 7, 8, 9, 25, 26, 27, 40, 41, 42, wherein the marking material is dry ink, liquid ink or solid ink (Page 2, paragraph [0026]).

Regarding claims 11, 12, 29, 30, 44, 45, wherein the phosphor properties includes emission properties including an emissions decay rate (Page 3, paragraph [0037] to page 4, paragraph [0039]).

Regarding claims 13, 14, 31, 32, 46, 47, wherein the emission properties include an emission wavelength (Page 8, paragraph [0083]).

Regarding claims 15, 16, 33, 34, 50, 51, wherein the phosphor properties includes absorption wavelength (Page 3, paragraph [0032]).

Regarding claim 17, further comprising: providing a light source (lamp) for producing light having properties which are matched to the absorption properties of the phosphorescent material (Figure 11).

Regarding claim 18, further comprising: providing a photo detector (detection) having detection properties which are matched to the emission properties of the phosphorescent material (Figure 11).

Regarding claim 19, wherein the marking material container is not disposed in the container position further comprising: generating a signal indicating that the marking material container is not disposed in the container position (Page 2, paragraph [0010]).

Regarding claim 35, a system (Figures 11-13) for obtaining information from a marking material container comprising: a marking material container for holding a marking material and having a phosphorescent material with predetermined phosphor properties for emitting light with characteristics corresponding to the information; a light source (lamp) for producing a light beam directed towards the phosphorescent material; a photo detector (detection) for detecting light emitted from the phosphorescent material; and a controller for determining characteristics of the light detected by the photo detector and generating the information (Figure 11).

Regarding claim 36, wherein the information identifies the marking material container (Page 2, paragraph [0010]).

Regarding claim 37, wherein the information identifies the marking material (Page 2, paragraph [0010]).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 52-54, 57-59 and 61-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Altfather et al (US 5,997,121) in view of Jones, II et al (US 2005/0178841).

Altfather et al disclose the following claimed features:

Regarding claim 52, a printer/copier (Figure 1) comprising: a marking material container (Figure 2, cartridge 10) for holding a marking material (ink 48); a light source (Figures 2 and 4, elements 34, 36, 94, 96) for producing light directed towards the ink; a photo detector (Figures 2 and 4, element 38) for detecting light emitted from the ink; and a controller (50) for determining characteristics of the light detected by the photo detector and generating information (Figure 4).

Regarding claim 53, wherein the information identifies the marking material container (cartridge 10).

Regarding claim 54, wherein the information identifies the marking material (ink 48).

Regarding claims 57, 58 and 59, wherein the marking material is dry ink, liquid ink or solid ink (ink 48).

Altfather et al disclose the claimed invention except for reciting the following features:

Further regarding claim 52, the container (Figure 12, "product") having a phosphorescent material ("Mark", page 2, paragraph [0026]) with predetermined phosphor properties.

Regarding claims 61 and 62, wherein the phosphor properties includes emission properties including an emissions decay rate (Page 3, paragraph [0037] to page 4, paragraph [0039]).

Regarding claims 63 and 64, wherein the emission properties include an emission wavelength (Page 8, paragraph [0083]).

Regarding claims 65 and 66, wherein the phosphor properties includes absorption wavelength (Page 3, paragraph [0032]).

Jones, II et al teach the following features:

Further regarding claim 1, the container having a phosphorescent material with predetermined phosphor properties (Figure 11).

Regarding claims 61 and 62, wherein the phosphor properties includes emission properties including an emissions decay rate (Page 3, paragraph [0037] to page 4, paragraph [0039]).

Regarding claims 63 and 64, wherein the emission properties include an emission wavelength (Page 8, paragraph [0083]).

Regarding claims 65 and 66, wherein the phosphor properties includes absorption wavelength (Page 3, paragraph [0032]).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include container having a phosphorescent material with predetermined phosphor properties such as emission decay rate and absorption wavelength, as taught by Jones, II et al into Altfather et al, for the purpose of obtaining security information for a given product (Page 2, paragraph [0010]).

8. Claims 5, 6, 10, 23, 24, 28, 38, 39 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones, II et al (US 2005/0178841) in view of Hillmann et al (US 5,365,312).

Jones, II et al disclose the claimed invention except for reciting wherein the information identifies the manufacturer and date information and the material is toner.

Hillmann et al teach in Figures 1 and 2 the information identifies the manufacturer and date information (column 4, lines 39-53) and the material is toner (Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the manufacturer and date information and the material is toner, as taught by Hillmann et al into Jones, II et al, for the purpose of identifying the manufacture date of the cartridges or containers.

9. Claims 55, 56 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Altfather et al (US 5,997,121) in view of Jones, II et al (US 2005/0178841) as applied to claim 52 above, and further in view of (US).

Altfather et al as modified by Jones, II et al disclose the claimed invention except for reciting wherein the information identifies the manufacturer and date information and the material is toner.

Hillmann et al teach in Figures 1 and 2 the information identifies the manufacturer and date information (column 4, lines 39-53) and the material is toner (Abstract).

It would have been further obvious to one having ordinary skill in the art at the time the invention was made to include the manufacturer and date information and the material is toner, as taught by Hillmann et al into Altfather et al as modified by Jones, II et al, for the purpose of identifying the manufacture date of the cartridges or containers.

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An H. Do whose telephone number is 571-272-2143. The examiner can normally be reached on Monday-Friday (Flexible).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2853

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AD
March 1, 2006



An H. Do
Examiner
Art Unit 2853